

REMARKS

Applicant respectfully requests reconsideration of this application as amended. No claims have been amended, added, or canceled by this Response. Therefore, claims 1, 2, 5, 6, 8-22, and 25 are present for examination.

35 U.S.C. §103(a) Rejections

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Manual of Patent Examining Procedure (MPEP), §2143, 8th Edition, February 2003.

Muller et al. in view of Anderson et al.

Claims 1, 6, 10, 12, 13, 14, 17 and 19 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Muller, et al. (U.S. Patent No. 6,256,740 B1) in view of Anderson, et al. (U.S. Patent No. 6,578,142).

Applicant respectfully disagrees that claims 1, 6, 10, 12, 13, 14, 17 and 19 are obvious over Muller in view of Anderson because:

1. The combination of Muller and Anderson does not teach all the claim limitations; and
2. Neither Muller nor Anderson provides the suggestion or motivation to combine the reference teachings.

The combination of Muller and Anderson does not teach all the claim limitations

Neither Muller nor Anderson teaches "before loading a driver for the I/O controller into the host, sending a verification message to the I/O enclosure, via the interconnection fabric, to determine whether a communication path exists to the I/O controller within the I/O enclosures", as required by claims 1, 6, 10, 12, 13, 14, 17 and 19.

While the Examiner admits that Muller is silent on this point, the Examiner cites Anderson for teaching this claim element at, for example, column 12, lines 22-67. However, this portion of Anderson speaks to downloading an application if a suitable connection exists and if the needed bandwidth is available. Anderson merely discloses determining if a network connection exists by "querying the operating system or by pinging the primary server is available" (Anderson, column 12, lines 28-30). Anderson, therefore, does not disclose "sending a verification message to the I/O enclosure".

Anderson also does not disclose "before loading a driver for the I/O controller into the host, sending a verification message to the I/O enclosure".

Instead, Anderson discloses downloading an application, not a driver, once a suitable connection exists and the needed bandwidth is available (Anderson, column 13, lines 1-10, for example, "In block 706, the download module 504 of the ISUA 86 will download a data chunk of the WDL 62a...", where the 62a includes applications, see column 9, lines 24-25).

Therefore, since neither Muller nor Anderson discloses at least these claim limitations, the combination of Muller and Anderson does not teach every element of the claimed invention, and claims 1, 6, 10, 12, 13, 14, 17 and 19 are not obvious over Muller in view of Anderson.

Neither Muller nor Anderson provides the suggestion or motivation to combine the reference teachings

Even if the combination of references teaches every element of the claimed invention, a rejection based on obviousness is improper without a motivation to combine the references. (MPEP, §2143.01, *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457-58 (Fed. Cir. 1998), see MPEP §2143.01). Thus, even if the combination of Muller and Anderson produces the Applicant's claimed invention, the §103(a) rejection is improper because neither Muller nor Anderson provides the suggestion or motivation to combine the reference teachings.

There is no suggestion or motivation to combine the references if the prior art does not suggest the desirability of the claimed invention. MPEP §2143.01.

Neither Muller nor Anderson suggests the desirability of the claimed invention. Muller is directed to a method for communicating data in a highly distributed parallel processing computer architecture that includes I/O nodes and compute nodes (Muller, see for example, Abstract), and Anderson is directed to a method for installing and configuring software on a computer (Anderson, see for example, column 1, lines 10-11).

Simply put, nowhere does Muller suggest the desirability for a fabric-connected system in which "before loading a driver for the I/O controller into the host, sending a verification message to the I/O enclosure, via the interconnection fabric, to determine whether a communication path exists to the I/O controller within the I/O enclosures", as required by claims 1, 6, 10, 12, 13, 14, 17 and 19. Also, nowhere does Anderson suggest the desirability for a fabric-connected system in which "before loading a driver for the I/O controller into the host, sending a verification message to the I/O enclosure, via the interconnection fabric, to determine whether a communication path exists to the I/O controller within the I/O enclosures", as required by claims 1, 6, 10, 12, 13, 14, 17 and 19.

Furthermore, Muller and Anderson are directed to different network types, and for solving problems specific to those network types. For example, Muller is directed to the management of storage and computing resources connected by an interconnection fabric (Muller, column 3, lines 7-8). Anderson, however, is directed to a method for automatically configuring and installing software on a computer based on a user's profile, for example (Anderson, column 9, lines 66-

67).

The fact that Muller and Anderson can be combined does not render the combination obvious unless the prior art also suggests the desirability of the combination. MPEP §2143.01. As discussed above, neither Muller nor Anderson suggests the desirability of the claimed invention. Therefore, Appellant respectfully submits that the combination of Muller and Anderson, even if combinable, is not obvious.

Since the combination of Muller and Anderson does not teach all the claim limitations, and since neither Muller nor Anderson provides the suggestion or motivation to combine the reference teachings, claims 1, 6, 10, 12, 13, 14, 17, and 19 are not obvious over Muller in view of Anderson. Therefore, Applicant respectfully requests that the Examiner withdraw his rejection of claims 1, 6, 10, 12, 13, 14, 17 and 19.

Muller et al. in view of Anderson et al., in further view of Lighthart et al.

Claims 2, 5, 11, 18, and 22 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Muller, et al. (U.S. Patent No. 6,256,740 B1) in view of Anderson, et al. (U.S. Patent No. 6,578,142) in further view of Lighthart, et al. (U.S. Patent No. 4,845,609).

Applicant respectfully disagrees that claims 2, 5, 11, 18, and 22 are obvious over Muller in view of Anderson and Lighthart because:

1. The combination of Muller, Anderson, and Lighthart does not teach all the claim limitations; and
2. Neither Muller, Anderson, nor Lighthart provides the suggestion or motivation to combine the reference teachings.

The combination of Muller, Anderson, and Lighthart does not teach all the claim limitations

First, since claims 2, 5, 11, and 18 depend, directly or indirectly, from independent claims 1, 6, and 13, and therefore they inherit the limitations of those independent claims, and since claims 1, 6, and 13 are not obvious over the combination of Muller and Anderson as discussed above, it is axiomatic that claims 2, 5, 11, and 18 are not obvious over the combination of Muller and Anderson. ("If an independent claim is nonobvious under 35 U.S.C. §103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).")

Moreover, claims 2, 5, 11, and 18 are also not obvious over the combination of Muller, Anderson, and Lighthart because Lighthart does not teach what is missing from Muller and Anderson. Namely, Lighthart does not teach "before loading a driver for the I/O controller into the host, sending a verification message to the I/O enclosure, via the interconnection fabric, to determine whether a communication path exists to the I/O controller within the I/O enclosures", as required by claims 2, 5, 11, and 18.

Furthermore, neither Muller, Anderson, nor Lighthart teaches "alternatively, before loading a driver for the I/O controller into the host, determining whether a host-fabric adapter in the host has been initialized and connected to the interconnection fabric and if the host-fabric adapter in the host has been initialized and connected to the interconnection fabric, then loading the driver into the host", as required by claims 2, 5, 11, 18, and 22.

The Examiner admits that Muller as modified (presumably by Anderson) is silent with respect to this claim element (see Office Action mailed April 21, 2004, page 5, item 18). However, Applicant respectfully disagrees that Lighthart teaches this claim element as asserted by the Examiner. For example, at column 13, lines 4-46 (cited by the Examiner), Lighthart discloses a host adapter that executes self-tests to verify the functionality of its components, including initialization of the operating system and the adapter board. Nowhere, including this cited portion, does Lighthart disclose, at the least, "determining whether a host-fabric adapter in the host has been initialized and connected to the interconnection fabric", as required by claims 2, 5, 11, 18, and 22.

Therefore, since neither Muller, Anderson, nor Lighthart discloses at least these claim limitations, the combination of Muller, Anderson, and Lighthart does not teach every element of the claimed invention, and claims 2, 5, 11, 18, and 22 are not obvious over Muller in view of Anderson and Lighthart.

Neither Muller, Anderson, nor Lighthart provides the suggestion or motivation to combine the reference teachings

Even if the combination of references teaches every element of the claimed invention, a rejection based on obviousness is improper without a motivation to combine the references. (MPEP, §2143.01, *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457-58 (Fed. Cir. 1998), see MPEP §2143.01). Thus, even if the combination of Muller, Anderson, and Lighthart produces the Applicant's claimed invention, the §103(a) rejection is improper because neither Muller, Anderson, nor Lighthart provides the suggestion or motivation to combine the reference teachings.

There is no suggestion or motivation to combine the references if the prior art does not suggest the desirability of the claimed invention. MPEP §2143.01. As discussed above, neither Muller nor Anderson suggests the desirability of the claimed invention. Furthermore, Lighthart also does not suggest the desirability of the claimed invention. Lighthart is directed to a communication subsystem for connecting multiple user devices to a multiple-user host computer that overcomes connector size and complexity disadvantages associated with, for example, expansion in traditional systems. In Lighthart, a host adapter capable of supporting many cluster controllers and terminals fits in a single slot in the host computer card cage. Lighthart, therefore, indicates no desirability for modification or combination with other references for a communication subsystem in which "alternatively, before loading a driver for the I/O controller into the host, determining whether a host-fabric adapter in the host has been initialized and connected to the interconnection fabric and if the host-fabric adapter in the host has been initialized and connected to the interconnection

fabric, then loading the driver into the host", as required by claims 2, 5, 11, 18, and 22. Lighthart simply does not suggest the desirability for making this determination (e.g., "whether a host-fabric adapter in the host has been initialized and connected to the interconnection fabric") prior to loading a driver.

Since the combination of Muller, Anderson, and Lighthart does not teach all the claim limitations, and since neither Muller, Anderson, and Lighthart provides the suggestion or motivation to combine the reference teachings, claims 2, 5, 11, 18, and 22 are not obvious over Muller in view of Anderson and Lighthart. Therefore, Applicant respectfully requests that the Examiner withdraw his rejection of claims 2, 5, 11, 18, and 22.

Muller et al. in view of Anderson et al. in further view of Chrabaszczy et al.

Claims 8, 9, and 15 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Muller, et al. (U.S. Patent No. 6,256,740 B1) in view of Anderson, et al. (U.S. Patent No. 6,578,142) in further view of Chrabaszczy, et al. (U.S. Patent No. 6,263,387).

Applicant respectfully disagrees that claims 8, 9, and 15 are obvious over Muller in view of Anderson and Chrabaszczy because:

1. The combination of Muller, Anderson, and Chrabaszczy does not teach all the claim limitations; and
2. Neither Muller, Anderson, nor Chrabaszczy provides the suggestion or motivation to combine the reference teachings.

***The combination of Muller, Anderson, and Chrabaszcz does not teach all
the claim limitations***

First, since claims 8, 9, and 15 depend, directly or indirectly, from independent claims 6 and 13, and therefore they inherit the limitations of those independent claims, and since claims 6 and 13 are not obvious over the combination of Muller and Anderson as discussed above, it is axiomatic that claims 8, 9, and 15 are not obvious over the combination of Muller and Anderson. ("If an independent claim is nonobvious under 35 U.S.C. §103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).")

Moreover, claims 8, 9, and 15 are also not obvious over the combination of Muller, Anderson, and Chrabaszcz because Chrabaszcz does not teach what is missing from Muller and Anderson. Namely, Chrabaszcz does not teach "before loading a driver for the I/O controller into the host, sending a verification message to the I/O enclosure, via the interconnection fabric, to determine whether a communication path exists to the I/O controller within the I/O enclosures", as required by claims 8, 9, and 15.

Therefore, since neither Muller, Anderson, nor Chrabaszcz disclose at least these claim limitations, the combination of Muller, Anderson, and Chrabaszcz does not teach every element of the claimed invention, and claims 8, 9, and 15 are not obvious over Muller in view of Anderson and Chrabaszcz.

Neither Muller, Anderson, nor Chrabaszc provides the suggestion or motivation to combine the reference teachings

Even if the combination of references teaches every element of the claimed invention, a rejection based on obviousness is improper without a motivation to combine the references. (MPEP, §2143.01, *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457-58 (Fed. Cir. 1998), see MPEP §2143.01). Thus, even if the combination of Muller, Anderson, and Chrabaszc produces the Applicant's claimed invention, the §103(a) rejection is improper because neither Muller, Anderson, nor Chrabaszc provides the suggestion or motivation to combine the reference teachings.

There is no suggestion or motivation to combine the references if the prior art does not suggest the desirability of the claimed invention. MPEP §2143.01. As discussed above, neither Muller nor Anderson suggests the desirability of the claimed invention. Chrabaszc also does not suggest the desirability of the claimed invention. Chrabaszc is directed to a system for automatically configuring a server after a device has been hot added to the computer system (Chrabaszc, see for example, Abstract). Chrabaszc, however, indicates no desirability for modification or combination with other references to produce a fabric-interconnected system, or a fabric-interconnected system in which a verification message is sent to determine whether a communication path exists to the I/O controller within the I/O enclosures, prior to loading a driver for the I/O controller as required by claims 8, 9, and 15.

Since the combination of Muller, Anderson, and Chrabaszc does not teach all the claim limitations, and since neither Muller, Anderson, and Chrabaszc provides the suggestion or motivation to combine the reference teachings, claims 8, 9, and 15 are not obvious over Muller in view of Anderson and Chrabaszc. Therefore, Applicant respectfully requests that the Examiner withdraw his rejection of claims 8, 9, and 15.

Muller et al. in view of Lighthart et al.

Claims 20 and 25 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Muller, et al. (U.S. Patent No. 6,256,740 B1) in view of Lighthart, et al. (U.S. Patent No. 4,845,609).

Applicant respectfully disagrees that claims 20 and 25 are obvious over Muller and Lighthart because:

1. The combination of Muller and Lighthart does not teach all the claim limitations; and
2. Neither Muller nor Lighthart provides the suggestion or motivation to combine the reference teachings.

The combination of Muller and Lighthart does not teach all the claim limitations

Neither Muller nor Lighthart teaches an operating system within a host capable of "determining if the given host-fabric adapter has been initialized for

fabric communication", and "if the given host-fabric adapter has been initialized for fabric communication, loading a driver that corresponds to the given fabric-attached I/O controller assigned to the host, into the host for communication with the fabric-attached I/O controller, via the interconnection fabric", as required by claims 20 and 25.

The Examiner admits that Muller is silent with respect to this claim element (see Office Action mailed April 21, 2004, page 10, item 39). However, Applicant respectfully disagrees that Lighthart teaches this claim element as asserted by the Examiner. For example, at column 13, lines 4-46 (cited by the Examiner), Lighthart discloses a host adapter that executes self-tests to verify the functionality of its components, including initialization of the operating system and the adapter board. Nowhere, including this cited portion, does Lighthart disclose "determining if the given host-fabric adapter has been initialized for fabric communication", and "if the given host-fabric adapter has been initialized for fabric communication, loading a driver that corresponds to the given fabric-attached I/O controller assigned to the host, into the host for communication with the fabric-attached I/O controller, via the interconnection fabric", as required by claims 20 and 25. In fact, Lighthart teaches away from these claims. Where claims 20 and 25 require that the operating system determine if the host fabric adapter has been initialized, Lighthart teaches that the host adapter determine if the operating system is initialized.

Therefore, since neither Muller nor Lighthart teaches every claim limitation

of claims 20 and 25, claims 20 and 25 are not obvious over Muller in view of Lighthart.

Neither Muller nor Lighthart provides the suggestion or motivation to combine the reference teachings

Even if the combination of references teaches every element of the claimed invention, a rejection based on obviousness is improper without a motivation to combine the references. (MPEP, §2143.01, *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457-58 (Fed. Cir. 1998), see MPEP §2143.01). Thus, even if the combination of Muller and Lighthart produces the Applicant's claimed invention, the §103(a) rejection is improper because neither Muller nor Lighthart provides the suggestion or motivation to combine the reference teachings.

There is no suggestion or motivation to combine the references if the prior art does not suggest the desirability of the claimed invention. MPEP §2143.01. As discussed above, neither Muller nor Lighthart suggests the desirability of the claimed invention. Therefore, the combination of Muller and Lighthart does not render claims 20 and 25 obvious.

Since the combination of Muller and Lighthart does not teach all the claim limitations, and since neither Muller nor Lighthart provides the suggestion or motivation to combine the reference teachings, claims 20 and 25 are not obvious over Muller and Lighthart. Therefore, Applicant respectfully requests that the

Examiner withdraw his rejection of claims 20 and 25.

Conclusion

Applicant respectfully submits that the all rejections cited by the Examiner have been overcome, and the claims are in condition for allowance.

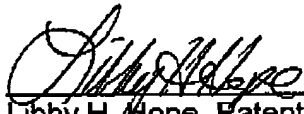
The Examiner is invited to initiate an interview with the undersigned by calling 949-498-0601 if the Examiner believes that such an interview will advance prosecution of this application.

Charge our Deposit Account

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Respectfully submitted,

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